

## REMARKS

### **I. Status of the Claims.**

Claims 1-5, 29, 30, 32-56, 58, 59 and 77-94 are pending. Claims 1-5, 29, 58, 59 and 77-94 were examined. Claims 30 and 32-56 have been withdrawn. The present amendment proposes amendments to claims 1, 3, 58, 59 and 77-80 which are believed to overcome the objections of record.

Applicants thank the Examiner for extending examination to include claim 59.

### **II. Amendments.**

Claim 1 has been amended to delete various options from the definition of  $R_1$ . The option "substituted phenoxy" has been limited to the options of claim 2.

Claim 3 has been amended to delete compounds 6, 29 and 34.

Claims 58 and 59 have been reworded to enhance the clarity of these claims further.

Claim 77 has been amended to delete various options from the definition of  $R_1$ .

Claims 78 and 79 have been amended to delete compounds 28, 29 and 39.

Claim 80 has been amended to delete various options from the definition of  $R_1$ . The option "substituted phenoxy" has been limited to the options of claim 2.

### **III. Request for an Interview.**

Applicants have carefully considered and addressed the remarks made in the Office Action and believe that they have provided below a complete response overcoming the outstanding objections. If, however, the response is not deemed to place the application in condition for allowance, issues remain, or new issues have arisen, Applicants request the courtesy of telephonic interview with the Examiner, at a time convenient to the Examiner, prior to the issuance of any further Office Action or an Advisory Action.

### **IV. Response to the Office Action.**

#### **A. Withdrawn Objections and Rejections.**

Applicants thank the Examiner for withdrawing the indefiniteness rejections made under 35 U.S.C. 112, second paragraph, the rejection of claims 1 and 58 made under 35 U.S.C.

§ 102(b) and the rejection of claims 2-5 and 29 made under 35 U.S.C. § 103(a). Applicants also thank the Examiner for withdrawing the objection to claims 1-5, 29 and 58 as being directed to non-elected subject matter.

**B. Allowable Subject Matter.**

The Office Action objects to claims 2, 4, 5, 29, 59 and 84-94 as depending from a rejected base claim but indicates that these claims would be allowable if written in independent form, including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for providing this helpful indication of allowable subject matter.

**C. Rejection of Claims 77-79 Under 35 U.S.C. § 102(b) – Matsuda.**

Claims 77-79 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Matsuda *et al.*, *Chem. Pharm. Bull.*, **1979**, 27(1), 183-192 ("Matsuda"). The Office Action alleged that Marumoto disclosed a compound corresponding to a compound as claimed in claim 77 having a CONH<sub>2</sub> group as R<sub>1</sub> in claim 77, and compound 39 in claims 78 and 79. This rejection will be moot upon entry of the amendment deleting a CONH<sub>2</sub> group as an option for R<sub>1</sub> in claim 77, and deleting compound 39 from claims 78 and 79.

**D. Rejection of Claim 77 under 35 U.S.C. § 102(b) – U.S. Patent No. 4,255,591.**

Claim 77 was rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 4,255,591 (the "'591 patent"). The Office Action alleged that the '591 patent disclosed a compound corresponding to a compound as claimed in claim 77 having phenylamino with a fluoro substituent as R<sub>1</sub>. This rejection will be moot upon entry of the amendment deleting a phenylamino group with a fluoro substituent as an option for R<sub>1</sub> in claim 77.

**E. Rejection of Claims 77-79 under 35 U.S.C. § 102(b) – U.S. Patent No. 4,255,565.**

Claims 77-79 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 4,255,565 (the "'565 patent"). The Office Action alleged that the '565 patent disclosed a compound corresponding to a compound as claimed in claim 77 having 4-fluoro-substituted phenylamino as R<sub>1</sub> in claim 77, and also corresponding to compound 28 in claims 78 and 79. This rejection will be moot upon entry of the amendment deleting a phenylamino group

with a fluoro substituent as an option for R<sub>1</sub> in claim 77, and deleting compound 28 from claims 78 and 79.

**F. Rejection of Claims 77-79 under 35 U.S.C. § 102(b) – Bressi.**

Claims 77-79 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Bressi, *J. Med. Chem.*, **2000**, 43, 4135-4150 ("Bressi"). The Office Action alleged that Bressi disclosed a compound corresponding to a compound 29. This rejection will be moot upon entry of the amendment deleting a phenylamino group with a C<sub>5</sub> cycloalkylamino as an option for R<sub>1</sub> in claim 77, and deleting compound 29 from claims 78 and 79.

**G. Rejection of Claims 1, 58 and 80-83 under 35 U.S.C. § 103(a) – Marumoto.**

Claims 1, 58 and 80-83 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Marumoto *et al.*, *Chem. Pharm. Bull.*, 1975, 23(4), 759-774 ("Marumoto"). The Office Action alleged that Marumoto disclosed compounds overlapping in scope with the compound definition of claim 1, and that a pharmaceutical composition would have been obvious in view of Marumoto's disclosure that the compounds are useful as coronary vasodilators.

To expedite prosecution, Applicants submit that this rejection will be moot upon entry of the amendments to claims 1 and 58 excluding compounds disclosed by Marumoto as coronary vasodilators. Applicants respectfully note, however, their disagreement with the Office's position that cites *Ex parte Erdmann*, 194 USPQ 96 (Bd. Pat. App. Int. 1995) and *Ex parte Douros*, 163 USPQ 667 ((Bd. Pat. App. Int. 1968) support a *per se* rule that a pharmaceutical composition is obvious when a pharmaceutical utility is disclosed for a known compound. The Federal Circuit has held that there are no *per se* rules of obviousness. In *re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) ("reliance on *per se* rules of obviousness is legally incorrect and must cease.") Thus even if Marumoto did happen to disclose compounds within the scope of the claims as having coronary vasodilator activity, it would not have been obvious to make a pharmaceutical composition of such compounds at the time the present invention was made due to the known toxic effects of adenosine derivatives that Applicants have documented in their response filed on May 26, 2011. The rejection also did not explain why a composition having up

to 500mg of the compound would have been obvious, as claimed in claim 58, nor why an oral dosage form in particular would have been obvious as recited in claims 80-83.

**H. Rejection of Claims 1, 3, 58 and 77-83 under 35 U.S.C. § 103(a) – Marumoto.**

Claims 1, 3, 58 and 77-83 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Bressi. The Office Action alleged that Bressi disclosed a compound overlapping in scope with the compound definition of claim 1, and that a pharmaceutical composition would have been obvious in view of Bressi's disclosure that the compounds are useful for treating trypanosomiosis.

To expedite prosecution, Applicants submit that this rejection will be moot upon entry of the amendments to claims 1, 3, 77-80 excluding compounds disclosed by Bressi as being useful for treating trypanosomiosis. Applicants respectfully note, however, their disagreement with the Office's position in making the rejection for similar reasons to those presented above.

**I. Objection to Claims 2, 4, 5, 29, 59 and 84-94.**

The Office Action objects to claims 2, 4, 5, 29, 59 and 84-94 as depending from a rejected base claim. Applicants submit the objection will be moot upon entry of the amendment overcoming the objections of record.

**J. Premature Final Office Action.**

Since the Office Action dated August 19, 2011 was the first Office Action on the merits of claim 59, which should not previously have been withdrawn, Applicants respectfully submit that the Office Action dated August 19, 2011 was prematurely made final. The present response is the first opportunity Applicants have been provided to respond to the objections made to claim 59.

**K. Request for Rejoinder.**

Since the elected claims will be allowable upon entry of the amendments, Applicants request rejoinder of the withdrawn method claims 30 and 32-56 under the rejoinder provisions set forth in MPEP 821.04. If the Office considers that there are issues presented by rejoinder of these claims, Applicants request that the Examiner contact the undersigned by telephone to

Applicant : Martyn Pritchard et al.  
Serial No. : 10/598,520  
Filed : December 7, 2007  
Page : 27 of 27

Attorney's Docket No.: 29566-0009US1/P47627.US01

discuss potential amendments that might be made to obviate such issues prior to the issuance of any further Office Action or Advisory Action.

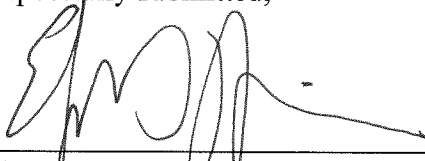
**V. Conclusion**

Applicants respectfully assert that the rejections of record have been overcome by way of this response. Allowance of all claims is respectfully requested. The Examiner is invited to contact Applicants' undersigned representative at 302-530-8837 if there are any questions regarding the claimed invention.

If not accompanied by an independent petition, this paper constitutes a Petition for an Extension of Time for an amount of time sufficient to extend the deadline if necessary. The Commissioner is authorized to debit any fees and apply any credits to Deposit Account No. 06-1050 referencing Attorney Docket No. 29566-0009US1.

Respectfully submitted,

Date: December 19, 2011.

  
\_\_\_\_\_  
Eifion Phillips, D.Phil.  
Reg. No. 55,538

Customer Number 26161  
Fish & Richardson P.C.  
Telephone: (302) 652-5070  
Facsimile: (877) 769-7945